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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



August 15, 2022

Governor's Office of Planning & Research

**Aug 15 2022**

**STATE CLEARINGHOUSE**

Smita Deshpande  
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**Subject: I-5 Improvement Project from the County Line to Avenida Pico**

Dear Ms. Deshpande:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the California Department of Transportation (Caltrans) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### **CDFW ROLE**

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the state. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

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## PROJECT DESCRIPTION SUMMARY

**Proponent:** California Department of Transportation (Caltrans)

**Project Location:** The Project limits extend from 1.4 miles south of the San Diego County line in unincorporated County of San Diego, north to Avenida Pico in the City of San Clemente, County of Orange, along Interstate 5 (I-5).

**Project Description/Objectives:** Caltrans intends to add a High Occupancy Vehicle Lane (HOV) on I-5 in both the northbound and southbound directions between the San Diego County line and the I-5/Avenida Pico interchange by widening the freeway in both directions. Available paved freeway space will be used to add lanes. The Project will also reestablish existing auxiliary lanes, widen existing undercrossings, and replace two existing overcrossings to accommodate the proposed HOV lanes.

The NOP indicates Caltrans will prepare a DEIR that will include two alternatives: Alternative 1 (No Build) and Alternative 2 (Build Alternative). Under the Build Alternative, Caltrans would convert the existing southbound inside general purpose lane between Avenida Pico and Avenida Presidio to an HOV lane, requiring outside widening to reestablish the fourth general purpose lane between Avenida Presidio and the San Diego County/Orange County line. In the northbound direction, Caltrans would widen I-5 to the outside to accommodate the additional HOV lane, which would tie into the existing HOV lane at Avenida Pico. According to the NOP, the Build Alternative would require the widening or replacement of several bridges.

**Biological Setting:** Although the Project limits include the northernmost 1.4 miles of I-5 in San Diego County, the biological impacts will occur beginning at the San Diego/Orange County line and continuing north on I-5 to Avenida Pico (Jayna Harris, LSA Associates, personal communication, August 2, 2022).

The area along both sides of I-5 within the Project limits is mostly developed, with the exception of the extensive San Clemente State Beach area immediately west of the Project. Additionally, the Project would likely impact at least three stream crossings in Orange County. According to CDFW's Passage Assessment Database, all three are unnamed tributaries to the Pacific Ocean. The northernmost crossing south of Avenida Pico is commonly known as Segunda Deshecha Cañada (Segunda Deshecha), which, although channelized at this location, includes potential southern California steelhead (southern steelhead) habitat upstream (Kyle Evans, CDFW, personal communication, July 12, 2022). Additionally, the Project limits include San Mateo Creek, a known southern California southern steelhead stream, although Caltrans anticipates no biological impacts at this location.

According to the California Natural Diversity Database (CNDDDB), special status species that overlay the Project limits and are presumed extant include California Rare Plant Rank 1B.1 Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), Federal Endangered Species Act (ESA) candidate monarch – California overwintering population (*Danaus plexippus* pop. 1; monarch), State Species of Special Concern (SSC) western spadefoot (*Spea hammondi*), SSC and ESA-listed coastal California gnatcatcher (*Polioptila californica californica*), CESA-listed tricolored blackbird (*Agelaius tricolor*), and SSC Mexican long-tongued bat (*Choeronycteris mexicana*).

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Additionally, the Orange County vegetation layer in CDFW's Biogeographic Information and Observation System (BIOS) indicates patches of southern willow scrub, annual grassland, and coastal sage scrub-grassland ecotone in several locations adjacent to the I-5 Project area.

## COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations to assist Caltrans in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. The DEIR should provide adequate and complete disclosure of the Project's potential impacts on biological resources [Pub. Resources Code, § 21061; CEQA Guidelines, §§ 15003(i), 15151]. CDFW looks forward to commenting on the DEIR when it is available.

### Specific Comments

1. Southern Steelhead and Fish Passage. The Project limits include crossings over four tributaries to the Pacific Ocean, including San Mateo Creek and Segunda Deshecha. Since no biological impacts are anticipated at the San Mateo Creek bridge, no further discussion regarding this crossing is included in this letter. While historical southern steelhead data may be difficult to obtain for Segunda Deshecha, potential steelhead habitat exists in Segunda Deshecha upstream of the I-5 crossing. Additionally, the CDFW Passage Assessment Database (PAD) indicates that the California Conservation Corps conducted Caltrans First Pass Assessments at all the Project-related crossings in the spring of 2020, and all were determined to require a detailed survey to determine potential fish passage constraints.

According to California Streets and Highways Code section 156.3, if a Project affects a crossing on a stream where anadromous fish are, or historically were found, Caltrans must complete an assessment of potential barriers to fish passage prior to initiating Project design. Caltrans must also submit the assessment to CDFW. Furthermore, if a structural barrier exists, Caltrans must include remediation of the barrier in the design plans and develop the Project in consultation with CDFW. Additionally, Fish and Game Code section 5901 prohibits the construction or maintenance of any structure that prevents or impedes fish passage, pursuant to the Fish and Game code definition of "fish."

Given the presence of steelhead habitat and fish PAD assessments, CDFW recommends that the DEIR include a thorough discussion and analysis of the application of Fish and Game Code 5901 and the Streets and Highways Code requirements to the Project. We also recommend that a mitigation measure or measures be added to the DEIR which provides CDFW with a detailed assessment of the potential barriers to fish passage prior to commencing with Project designs. If any barriers exist, the measure(s) should call for the incorporation of remediation design(s), developed in consultation with CDFW. Additionally, we request that Caltrans consult with CDFW and the National Oceanic and Atmospheric Administration when considering the biological applicability of fish passage within any streams or tributaries which could be impacted by the Project or Project alternatives.

2. Potential Impacts to Overwintering Monarch Sites. CNDDDB indicates the presence of monarch California overwintering populations near I-5 in San Clemente. The western migratory monarch population that overwinters along the California coast has declined by more than 99 percent from an estimated four million butterflies just twenty years ago (CDFW 2022; Marcum and Darst 2021). Habitat loss and fragmentation, including grove senescence, are among the primary threats to the population (Thogmartin et al. 2017). Given the precipitous decline, the monarch is currently slated to be listed in 2024 under the Endangered Species Act (CDFW

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2022). The monarch is also included on CDFW's Terrestrial and Vernal Pool Invertebrates of Conservation Priority (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=149499&inline>) list and identified as a Species of Greatest Conservation Need in California's State Wildlife Action Plan (<https://wildlife.ca.gov/SWAP/Final>) (CDFW 2017; CDFW 2015). Additionally, the monarch meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, impacts on monarchs may require a mandatory finding of significance because the Project may threaten to eliminate an animal community and/or substantially reduce the number or restrict the range of an endangered, rare, or threatened species (CEQA Guidelines, § 15065). CDFW provides the following recommendations to avoid, minimize, and mitigate potential impacts to monarchs and overwintering habitat:

- a. the DEIR should include an assessment of the Project area to determine if the Project may impact monarchs or the overwintering habitat. If the Project results in potential direct or indirect impacts to monarchs or the overwintering habitat, the DEIR should also include an evaluation of the Project's potential impact and cumulative impact on monarchs. The DEIR should assess impacts on monarchs resulting from 1) loss and reduction of overwintering habitat; 2) loss or reduction of nectar plants; 3) altering overwintering habitat climatic conditions such as such as temperature, humidity, and wind; and 4) use of pesticides to maintain the Project's landscaping; and,
- b. if the Project would result in impacts to monarchs or the overwintering site, the DEIR should also include measures to first avoid, and then minimize, impacts on monarchs and overwintering habitat. If the Project would result in loss of overwintering habitat, CDFW recommends the DEIR describe compensatory mitigation so that there is no net loss of overwintering habitat. Mitigation for monarchs should be developed in consultation with a qualified biologist and the following resources in order to develop appropriate measures to mitigate for the Project's potential impacts on monarchs:
  - Western Monarch Butterfly Conservation Plan (Western Association of Fish and Wildlife Agencies 2019);
  - Overwintering Site Management and Protection (Western Monarch Count 2022);
  - Protecting California's Butterfly Groves (Xerces Society 2017);
  - Managing Monarch Habitat in the West (Xerces Society 2021a);
  - Pollinator-Friendly Native Plant Lists (Xerces Society 2021b);
  - Monarch Butterfly Nectar Plant Lists for Conservation Plantings (Xerces Society 2018);
  - Tropical Milkweed (Wheeler 2018); and,
  - CDFW's Monarch Butterfly webpage (CDFW 2022).
3. Potential Impacts to Bats. A review of the CNDDDB indicates presence of SSC bat species within one mile of the Project limits. As discussed in *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions* (Johnston et al. 2019), bridges, culverts, and other transportation infrastructure components can provide habitat for multiple bat species. Additionally, bats may roost in trees, especially in riparian habitat and on rocky banks. Since

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this Project includes crossings over several streams, including but not limited to, Segunda Deshecha, bats may roost within or near the Project footprint.

Given that CDFW considers bats non-game mammals, afforded protection by State law from take or harassment (Fish & G. Code § 4150, Cal. Code of Regs., tit. 14, § 251.1), the DEIR should include a bat roosting habitat assessment. If habitat is present, the DEIR should include survey results conducted in the bat maternity season (April 1 through August 31). If any bats are detected during surveys, the DEIR should also include a thorough discussion of potential impacts to bats from construction and operation of the Project and appropriate avoidance, minimization, and mitigation measures (CEQA Guidelines §15126.4[a][1]).

4. Sensitive Bird Species. Additional review of the CNDDDB indicates nearby occurrences of special status bird species, including coastal California gnatcatcher and tricolored blackbird. Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs, or nestlings, or otherwise lead to nest abandonment in trees and shrubs directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species. Therefore, CDFW provides the following recommendations:
  - a. Caltrans should take measures to primarily avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the MBTA); and,
  - b. proposed Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on-site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.
5. Plant Species. The CNDDDB also documents the presence of California Rare Plant Rank 1B.1 Blochman's dudleya within the Project vicinity. The DEIR should include an analysis of habitat suitability for the species. If suitable habitat is present and the Project may impact the habitat, the DEIR should include the location(s) and description of the habitat and consider the likelihood that the species may be present. Additionally, if species presence is likely, Caltrans should conduct a seasonally appropriate surveys and include the survey report(s) in the DEIR. The DEIR should discuss potential direct, indirect, and cumulative impacts to the species as well as proposed avoidance and mitigation measures.
6. Fish and Game Code Section 1600 et seq. As discussed above, the Project area includes stream crossings. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream or use

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material from a streambed. For any such activities, Caltrans must provide written notification to CDFW pursuant to Fish and Game Code Section 1600 et seq.

- a. CDFW's issuance of a Lake or Streambed Alteration Agreement (LSA) for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the Environmental Impact Report of the local jurisdiction (Lead Agency) for the Project. To minimize additional requirements by CDFW pursuant to section 1600 et seq. and/or under CEQA, the DEIR should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.
  - b. In the event the Project area may support aquatic, riparian, and wetland habitats, a preliminary delineation of the streams and the DEIR associated riparian habitats should be included in the DEIR. The delineation should be conducted pursuant to the U.S. Fish and Wildlife Service (FWS) wetland definition adopted by CDFW (Cowardin et al. 1970). Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and the Regional Water Quality Control Board Section 401 Certification.
  - c. In Project areas which may support ephemeral or episodic streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of these resources and help maintain natural sedimentation processes. Therefore, CDFW recommends effective setbacks be established to maintain appropriately sized vegetated buffer areas adjoining ephemeral drainages.
  - d. Caltrans should include and evaluate in the DEIR Project-related changes in upstream and downstream drainage patterns, runoff, and sedimentation.
  - e. As part of the LSA Notification process, CDFW requests a hydrological evaluation of the 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions. CDFW recommends the DEIR evaluate the results and address avoidance, minimization, and/or mitigation measures that may be necessary to reduce potential significant impacts.
7. Artificial Night Lighting. Artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Artificial night lighting has also been found to impact juvenile salmonid overwintering success by delaying the emergence of salmonids from benthic refugia and reducing their ability to feed during the winter (Contor and Griffith 1995). For nocturnally migrating birds, direct mortality due to collisions with anthropogenic structures due to attraction to light (Gauthreux 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al. 2008) and changes in habitat selection (McLaren et al. 2018). Additionally, there is growing evidence that light pollution alters behavior at regional scales, with migrants occupying urban centers at higher-than-expected rates as a function of urban illumination (La Sorte et al. 2021). While artificial light pollution can act as an attractant at both regional (La Sorte et al. 2021) and local (Van Doren et al. 2017) scales, evidence also exists of migrating birds avoiding strongly lit areas when selecting critical resting sites needed to rebuild energy stores (McLaren et al. 2018). Due to the proximity to San Clemente State Beach, the Pacific Ocean, and other beaches, and to avoid these potentially significant impacts, CDFW recommends the following measures be included in the DEIR:

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- a. Caltrans should avoid installing any no additional lighting where lighting does not already exist.
  - b. All light emitting diodes or bulbs installed as part of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.
  - c. Retroreflectivity of signs and road stripping should be implemented throughout the Project to reduce the need for electrical lighting.
  - d. All new or replacement light poles or sources of illumination should be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat with the Project corridor in coordination with CDFW. In addition, the light pole arm length and mast heights should be modified to site specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the Project corridor. In areas with sensitive natural landscapes or aquatic habitat Caltrans should also analyze and determine if placing the light poles at non-standard intervals may further reduce the potential for excessive light pollution caused by decreasing the number of light output sources in sensitive areas
8. Early Coordination with CDFW. According to the Caltrans-CDFW Interagency Agreement (Caltrans Contract; Contract Number 43A0398) Exhibit A, section 15.H, Caltrans should, "...work closely with CDFW ... to make optimal use of available staff resources. This includes consultation prior to commencement of design, prior to 30% design, and again prior to 60% design level." CDFW encourages Caltrans to maintain their commitment to this Agreement, especially where a selected Project alternative results in the need for a Lake and Streambed Alteration Agreement or may affect a sensitive species. Early design consultation circumvents negotiation challenges which may arise later in the process when higher design levels may have unforeseen significant impacts to biological resources.

### **General Comments**

9. Scientific Collecting Permit and Species Relocation Plan. CDFW currently implements its authority to issue permits for the take or possessing of wildlife, including mammals, birds, reptiles, amphibians, fish, certain plants, and invertebrates for scientific, educational, and propagation purposes (Cal. Code Regs., tit. 14, § 650) by issuing Scientific Collecting Permits (SCP). Therefore, prior to taking, possessing, or handling wildlife, CDFW recommends that on-site biologists obtain, as applicable, SCP(s). A Species Relocation Plan may also be appropriate to establish protocol for relocating wildlife, including guidelines for the SCP-holding biologist to capture unharmed and release found species in appropriate habitat within an adequate distance from the Project site, unless they are a CESA- and/or ESA-listed species, in which case coordination and direction from CDFW and/or FWS, respectively, would be required.
10. Impact Areas and Project Alternatives. The NOP includes a brief discussion of the Project but does not provide sufficient detail to conduct a comprehensive analysis of the potential impacts. To enable CDFW to adequately review and comment on the Project from the standpoint of the protection of plants, fish, and wildlife, CDFW recommends the following information be included in the DEIR:
- a. A complete discussion of the purpose and need for, and description of, the Project, including all staging areas and access routes to the construction and staging areas; and,

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- b. A range of feasible alternatives should be included to ensure that alternatives to the Project are fully considered and evaluated; the alternatives should avoid or otherwise minimize impacts to sensitive biological resources.

11. Biological Baseline Assessment. The NOP does not provide a full assessment of the flora and fauna within the Project's area of potential effect. The DEIR should provide a complete assessment of the flora and fauna within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a complete floral and faunal species compendium of the entire Project site, undertaken at the appropriate time of year. The DEIR should include the following information:

- a. CEQA Guidelines, section 15125(c), specifies that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region;
- b. a current inventory of the biological resources associated with each habitat type on-site and within the area of potential effect. CDFW's CNDDDB in Sacramento should be contacted at <https://www.wildlife.ca.gov/Data/BIOS> to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code;
- c. an inventory of rare, threatened, endangered and other sensitive species on-site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, § 15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and FWS;
- d. a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>); and,
- e. floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. *A Manual of California Vegetation*, second edition (Sawyer et al. 2008), should also be used to inform this mapping and assessment. Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts off-site. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

12. Cumulative Impact Analysis. The NOP does not provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources. To enable CDFW to adequately review and comment on the Project's potential impacts on biological resources, the DEIR should include a detailed discussion of potential impacts and specific measures to offset such impacts. The following should be addressed in the DEIR:

- a. a discussion of potential adverse impacts from lighting, noise, exotic species, and human activity should also be included. Mitigation measures proposed to alleviate such impacts should be included;



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- b. discussions regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a NCCP). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;
- c. a cumulative effects analysis should be developed as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to the DEIR impacts on similar wildlife habitats;
- d. to avoid impacts to nesting birds, the DEIR should require that, when biologically warranted, construction would occur outside of the peak avian breeding season which generally runs from February 1 through September 1 (as early as January 1 for some raptors). If Project construction is necessary during the bird breeding season, a qualified biologist with experience in conducting bird breeding surveys should conduct weekly bird surveys for nesting birds, within three days prior to the work in the area, and ensure no nesting birds in the Project area would be impacted by the Project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. CDFW recommends the buffer be a minimum width of 100 feet for common passerines, 300 feet from any CESA- or ESA-listed species, and 500 feet for raptors or State fully Protected species; be delineated by temporary fencing; and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nest zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the Project. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors;
- e. the DEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code section 65967, Caltrans must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves; and,
- f. CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the CNDDDB. The CNDDDB field survey form can be found at the following link:

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<https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

## FILING FEES

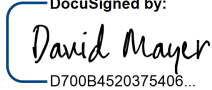
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by Caltrans and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

## CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a DEIR to assist Caltrans in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Simona Altman, Senior Environmental Scientist, at (805) 338-0474 or [Simona.Altman@wildlife.ca.gov](mailto:Simona.Altman@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
D700B4520375406...

David Mayer  
Environmental Program Manager  
South Coast Region

ec: California Department of Fish and Wildlife

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## References

- Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98–108.
- California Department of Fish and Wildlife. 2022. California Natural Diversity Database (CNDDDB). Available from: <https://wildlife.ca.gov/Data/CNDDDB>.
- California Department of Fish and Wildlife. 2022. Monarch butterflies. Available from: <https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly>

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- California Department of Fish and Wildlife. 2017. California terrestrial and vernal pool invertebrates of conservation priority. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=149499&inline>
- California Department of Fish and Wildlife. 2015. State wildlife action plan: a conservation legacy for Californians. Available from: <https://wildlife.ca.gov/SWAP/Final>
- California Department of Fish and Wildlife, Passage Assessment Database, July 2022.
- California Environmental Quality Act (CEQA). California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000.
- Contor, Craig R., and J.S. Griffith. 1995. Nocturnal emergence of juvenile rainbow trout from winter concealment relative to light intensity. *Hydrobiologia* Vol. 299: 179-18.
- Cowardin, Lewis M., et al. 1970. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, FWS.
- Gauthreaux Jr., S.A., and C.G. Belser. 2006. Effects of artificial night lighting on migrating birds. In *Ecological Consequences of Artificial Night Lighting*, edited by C. Rich and T. Longcore, pp. 67-93. Washington D.C.: Island Press
- Johnston, Dave S., Kim Briones, and Christopher Pincetich. 2019. California Bat Mitigation: A Guide to Developing Feasible and Effective Solutions. H. T. Harvey & Associates, Los Gatos, CA. Prepared for the California Department of Transportation, Office of Biological Studies, Sacramento, CA. Task Order 7, Agreement No.43A0355.
- Jones and Stokes Associates, Inc., “Vegetation - Orange County - [ds1395],” 1992, Biogeographic Information and Observation System, California Department of Fish and Wildlife, retrieved August 5, 2022, <https://wildlife.ca.gov/Data/BIOS>.
- La Sorte. February, 2021. Seasonal Variation in the effects of artificial light at night on the occurrence of nocturnally migrating birds in urban areas. *Environmental Pollution*, Volume 270.
- Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. *Frontiers in Ecology and the Environment* 2:191–198.
- Marcum, S., & C. Darst. (2021). Western Monarch Butterfly Conservation Recommendations. Available from: <https://wafwa.org/wp-content/uploads/2021/10/Western-Monarch-Sec-7-Conservation-Recs-08.31.2021.docx>
- McLaren, et. al. 2018. Artificial light at night confounds broad-scale habitat use by migrating birds.
- Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130–139.
- Poot, H., B. J. Ens, H. de Vries, M. A. H. Donners, M. R. Wernand, and J. M. Marquenie. 2008. Green light for nocturnally migrating birds. *Ecology and Society* 13(2): 47.
- Sawyer, J. O., Keeler-Wolf, T., and Evens, J.M. 2008. A manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.
- Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology* 19:1123–1127. Elsevier Ltd.
- Thogmartin, W. E., Wiederholt, R., Oberhauser, K., Drum, R. G., Diffendorfer, J. E., Altizer, S., Taylor, O. R., Pleasants, J., Semmens, D., Semmens, B., Erickson, R., Libby, K., & Lopez-Hoffman, L. (2017). Monarch butterfly population decline in North America: Identifying the threatening processes. *Royal Society Open Science*, 4(9). Available from: <https://royalsocietypublishing.org/doi/10.1098/rsos.170760>
- Van Doren, et. al. 2017. High Intensity Urban Light Installation Dramatically Alters Nocturnal Bird Migration.
- Western Association of Fish and Wildlife Agencies. 2019. Western Monarch Butterfly Conservation Plan 2019-2069. Available from: [https://wafwa.org/wpdm-package/western-monarch-butterfly-conservation-plan-2019-2069/?ind=1602171186650&filename=WAFWA\\_Monarch\\_Conservation\\_Plan.pdf&wpdmdl=13048&refresh=60f9defee81e21626988286](https://wafwa.org/wpdm-package/western-monarch-butterfly-conservation-plan-2019-2069/?ind=1602171186650&filename=WAFWA_Monarch_Conservation_Plan.pdf&wpdmdl=13048&refresh=60f9defee81e21626988286)

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Western Monarch Count. 2022. Overwintering Site Management and Protection. Available from:

<https://www.westernmonarchcount.org/overwintering-site-management-and-protection/>

Wheeler, J. 2018. Tropical Milkweed – a No-Grow. Xerces Society for Invertebrate Conservation.

Available from: <https://xerces.org/blog/tropical-milkweed-a-no-grow>

Xerces Society for Invertebrate Conservation. 2021a. Managing Monarch Habitat in the West.

Available from: <https://xerces.org/monarchs/western-monarch-conservation/habitat>

Xerces Society for Invertebrate Conservation. 2021b. Pollinator-Friendly Native Plant Lists.

Available from: <https://xerces.org/pollinator-conservation/pollinator-friendly-plant-lists>

Xerces Society for Invertebrate Conservation. 2018. Monarch butterfly nectar plant lists for

conservation plantings. Available from: [https://xerces.org/sites/default/files/publications/18-](https://xerces.org/sites/default/files/publications/18-003_02_Monarch-Nectar-Plant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf)

[003\\_02\\_Monarch-Nectar-Plant-Lists-FS\\_web%20-%20Jessa%20Kay%20Cruz.pdf](https://xerces.org/sites/default/files/publications/18-003_02_Monarch-Nectar-Plant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf)

Xerces Society for Invertebrate Conservation. 2017. Protecting California's Butterfly Groves.

Management Guidelines for Monarch Butterfly Overwintering Habitat. Available from:

[https://www.westernmonarchcount.org/wp-content/uploads/2014/11/2017-](https://www.westernmonarchcount.org/wp-content/uploads/2014/11/2017-040_ProtectingCaliforniaButterflyGroves.pdf)

[040\\_ProtectingCaliforniaButterflyGroves.pdf](https://www.westernmonarchcount.org/wp-content/uploads/2014/11/2017-040_ProtectingCaliforniaButterflyGroves.pdf)